

# Water resources

[Science](#), [Geography](#)



Assignment Geography What is the overall trend of the flows in The trend of flow is stable over the year with minimal change in the volume reflecting the changes in the climatic conditions of the area. The river covers an area of different climatic conditions but does not vary significantly within the year. The daily minimum and maximum discharges do not change rapidly reflecting a controlled and balanced environment of the area surrounding the river.

Why do the shapes of the three graphs differ?

The shapes of the graphs are affected by the precipitation, which affects the volume slightly. The difference in the spring branch is on precipitation and changes in the climatic conditions. At Sattler and Brussels points, the volume of discharge indicates similarity in the environmental conditions of the areas surrounding the river. Therefore, Guadalupe River covers areas with similar climatic conditions that do not change abruptly making the discharge to be even.

Why does the New Braunfels hydrograph look more like the Spring Branch hydrograph?

The climatic conditions of the two areas is relatively same, making the discharge volumes relatively equal, with the daily maximum and daily minimum varying minimally. The areas around the branches did not register changes in the land use that could affect the amount of discharge.

Can you see a correlation between stream flow and precipitation? How would you rate the correlation?

There is a significant correlation between the flow and precipitation as witnessed in the change of the volume of discharge. The months of January

to April register constant precipitation with the rest of the years having minimal precipitation. The relation between the minimal, maximum and mean discharge is constant with minimal variation in the discharge indicating the similarity of the environmental conditions.

#### Reference

Brutsaert, W. (2005). Hydrology: An Introduction. Cambridge: Cambridge University Press.